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PIC/D-116-59
12 June 1959

MEMORANDUM FOR: Deputy Director (Plans)

25X1A SUBJECT: [redacted] Interest in Modification or Replacement of the Panoramic Camera for Geodetic Purposes

25X1A REFERENCE: [redacted] dated 8 June 1959

1. In response to the question raised in your referenced memorandum, I believe that it is fair to state that [redacted] 25X1A is very much interested in almost anything that can be done to extend the use of the panoramic camera for geodetic purposes.

25X1A

2. As you are aware, [redacted] is now preparing a paper on this subject in response to [redacted] request. We have 25X1A offered some of our thoughts which might be reflected in this paper. Generally speaking, I believe that little progress can be made in extending the panoramic camera's utility into the geodetic field. The panoramic idea sacrifices the point perspective of the conventional single frame camera. Even with a point perspective the solution to the geodetic problem is difficult and has not yet been as readily achieved as the military mappers would desire it to be. Computers have now made iterative solutions practical and these coupled with Monticello type matching offer a bright hope for the photogrammetrists in the solution of control extension problems.

3. It is my opinion that the problem of geodetic control extension for missile target data sheets could best be solved presently with photography from a short focus, perhaps 6" or 3", distortion free, wide angle lens such as Baker's or the Swiss Avigon at an altitude around 1000 miles. Of course, with this we would need the same controls on lens calibration, film distortion, attitude and space resection. In support of this opinion I would point out the most recent discussions of the 117L - E4 Mapping Package. The Advisory Committee is suggesting a short focal length lens and a greater altitude provided the retro rocket capability and tracking lead times will permit recovery from 1000+ miles altitude in orbit.

25X1A [redacted]

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